

[0032] Claims:

1. A method of determining an appropriate condition for leveling a vehicle having a height adjustable air suspension system, said method comprising the steps of:
 - a) determining an acceleration value of the vehicle;
 - b) comparing said acceleration value to a pre-determined threshold value; and,
 - c) determining whether an appropriate condition exists for leveling the vehicle based on said comparison.
2. A method according to claim 1 further comprising the step of initiating an action based on said determination of step d).
3. A method according to claim 2, wherein when said acceleration value is less than said threshold value, said step of initiating an action includes initiating a leveling adjustment to the suspension system of the vehicle.
4. A method according to claim 3, wherein said threshold value is from about 0.2 g to about 0.4 g.
5. A method according to claim 2, wherein said acceleration value is greater than said threshold value.
6. A method according to claim 5, wherein said step of initiating an action includes discontinuing a leveling adjustment to the suspension system of the vehicle.

7. A method according to claim 5, wherein said threshold value is a first threshold value, said method further comprising the step of comparing said acceleration value to a second threshold value that is less than said first threshold value.
8. A method according to claim 7, wherein said second threshold value is from about 0.05 g to about 0.25 g.
9. A method according to claim 7, wherein said step of comparing said acceleration value to a second threshold value further includes determining whether said acceleration value is less than said second threshold value for a time greater than a predetermined time.
10. A method according to claim 9, wherein said pre-determined time is a time greater than about 1 second.
11. A method according to claim 9, wherein said step of initiating an action includes initiating a leveling adjustment to the suspension system of the vehicle.
12. A method according to claim 1 further comprising the step of repeating steps a) to c) after a pre-determined time interval.
13. A method according to claim 12, wherein said pre-determined time interval is a time greater than about 30 seconds.

14. A method of determining appropriate conditions for leveling a vehicle having a height adjustable air suspension system, said method comprising the steps of:

- a) providing an acceleration-determining device suitable for determining an acceleration of the vehicle and adapted to output a signal corresponding to said acceleration;
- b) providing a comparator in electrical communication with said acceleration-determining device and adapted to compare said signal to a pre-determined threshold;
- c) determining an acceleration of the vehicle utilizing said acceleration-determining device and communicating said signal corresponding to said acceleration to said comparator;
- d) comparing said signal to said pre-determined threshold using said comparator; and,
- e) determining whether an appropriate condition exists for leveling the vehicle based on said comparison.

15. A method according to claim 14 further comprising the step of initiating an action based on said determination of step e).

16. A method according to claim 15 further comprising the step of providing a controller operatively associated with the suspension system and adapted to selectively initiate leveling adjustments to the suspension system of the vehicle.

17. A method according to claim 16, wherein when said acceleration is less than said threshold, said step of initiating an action includes said controller initiating a leveling adjustment to the suspension system of the vehicle.

18. A method according to claim 16, wherein when said acceleration is greater than said threshold, said step of initiating an action includes said controller discontinuing a leveling adjustment to the suspension system of the vehicle.
19. A method according to claim 14 further comprising the step of repeating steps a) to e) after a pre-determined time interval.
20. A system for determining an appropriate condition for leveling a vehicle having a height adjustable air suspension system, said system comprising:
 - an acceleration-determining device adapted to determine an acceleration of a vehicle and output a first signal corresponding to said acceleration; and,
 - a comparator in electrical communication with said acceleration-determining device, said comparator adapted to receive said first signal from said determining device to compare said first signal with a pre-determined signal and to output a second signal indicative of said condition for leveling the suspension system of the vehicle.
21. A system according to claim 20, wherein said acceleration-determining device is an accelerometer.
22. A system according to claim 20 further comprising a timer in electrical communication with said comparator and adapted to output a timing signal.
23. A system according to claim 20 further comprising a controller in electrical communication with said comparator, said controller operatively associated with the

suspension system of the vehicle and adapted to selectively initiate adjustments to the suspension level of the vehicle.